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**FIGHTER PILOT RETENTION: PROFESSION VS
OCCUPATION**

by

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Preface

For the past decade and a half, my career has entailed fighter operations in Tactical Air Command, United States Air Forces Europe, and Pacific Air Forces, where I have witnessed the distressing problem of decreasing pilot retention. The United States Air Force has initiated many programs in an effort to stem the tide of pilot exodus. There have been pay increases, leather jackets, pilot bonuses, decreased additional duties, shorter Southwest Asia commitments, and fly only career paths. A look back throughout recent Air Force history shows one common trend. With the post gulf war drawdown being an exception, pilot retention has suffered as commercial airlines increase hiring.

The USAF has many options available to combat the problem of pilot retention. This paper will attempt to prove that while the pilot retention problem is well documented and the subject of numerous economic studies, the bottom line remains that the USAF cannot, nor should it try to compete with commercial airlines for pilots on a monetary basis. While bonuses have increased the comfort factor for those individuals that stay in the military, it is not having the impact the USAF hoped in retaining pilots. Because the Air Force cannot afford to compete financially, it must find an area where it can compete on an even field. This will not only reduce the exodus of pilots, but also increase the morale and effectiveness of the modern day warrior. Tradition and heritage are a unique aspect of the profession of arms. Emphasizing and building upon this fact will greatly benefit the Air Force.

Family life, finances, and benefits are all vitally important issues that factor in every pilot's career decision. Current Air Force senior leadership is addressing these factors. It is this author's contention that there remains one important part to this equation that has long been ignored or forgotten. That issue is one of "Esprit de Corps."

The challenges of the coming millennium are no less daunting than those of the past, and our United States Air Force will need a dedicated, professional fighter force to combat those challenges. While junior officers may have slightly different priorities, they are no less professional or dedicated to the mission. The modern day fighter pilot is a unique breed, and while special treatment is not expected or desired, it is important that senior leadership acknowledge this uniqueness, embrace and foster it, for it is this uniqueness upon which today's tactical air forces were built.

I wish to take this opportunity to acknowledge the immeasurable support and help I received in the process of completing this project. First and foremost, I would like to thank Colonel John W. Rosa, Commandant, Air Command and Staff College. His guidance and wisdom were instrumental in keeping this project in focus and his efforts were instrumental in its completion. Additionally I want to acknowledge the assistance received from the staff of the Air University Library, whose professionalism and dedication aided immeasurably the in depth research required, saving valuable time and effort.

Abstract

The fighter pilot of today has changed considerably from the youthful white-scarfed, crumpled-hat tiger who was the symbol of the hot pilot during WWII. The present day Mach two fighter requires a mature individual with a keen sense of responsibility and judgement. The complexities of modern day aircraft coupled with the limitation of the single seat pilot, (in most cases), impose severe demands on mental and physical stamina.

The fighter pilot's life is a lonely one: he must act as radio operator, navigator, and weaponeer, in addition to his normal duties as pilot. He must be capable of flying thousands of miles over vast expanses of water, rendezvousing with tanker aircraft and, through air refueling, remain aloft for as long as 12 hours, accomplishing his mission under all types of adverse weather conditions. This is only a prelude to his primary task – to develop skills and know-how of performing a variety of combat functions. He must be capable of delivering the full spectrum of explosives, from firing guns to attacking targets with thermonuclear megaton weapons. To establish a high degree of proficiency in all phases of the tactical mission requires a rigorous and continuous training schedule. The tactical fighter pilot must fire air-to-air, air-to-ground rockets, missiles, and guns and develop the techniques to glide, dive, and skip bombing, and master several specialized delivery techniques for nuclear weapons.¹

Elmer Fullis Jr.

While somewhat dated, Colonel Fullis very accurately describes what the Air Force expects of its fighter pilot force, not only in the 60s, but today, 30 years later. Fighter pilot retention in the United States Air Force is at an all time low, and as such, threatens to undermine our national security. The current retention problem has many wondering if there has been a change in attitude and focus within the fighter pilot community. A shift in values away from love of country and service before self, to one of military duty as just another job, and a “what is in it for me” attitude. There are numerous reasons for this

apparent shift including an unprecedented airline hiring boom, and an extremely robust economy with record low unemployment figures. This is combined with a perceived decrease in military benefits and a pay scale lagging the commercial sector by an average of 13 percent. An increased emphasis on family values, and the demanding operations tempo (doing more with less) add to the problem. The result of this perceived shift is the dramatic decrease in retention rates of fighter pilots in the United States Air Force. By analyzing the background of the USAF fighter pilot, historical trends, economic issues, family concerns, and leadership, this paper will attempt to explain the underlying problems of poor retention. Only by focusing on the unique aspects of the profession of arms, can the USAF expect to reverse this trend by promoting professionalism within the fighter pilot community through esprit de corps.

Notes

¹ Quoted in Lt. Col. Harris S. Boyce, "Tactical Air Command's Pilot Retention Problem," Research Report no. 3299 (Maxwell AFB, AL: Air War College, 1967), 3.

Chapter 1

Introduction

Fighter pilot retention in the USAF has historically been the highest of all rated personnel, and Air Force fighter pilots have chosen to make the military a career in greater percentages than tanker, transport, and bomber pilots. There is currently however, a fighter pilot shortage in the USAF of 536 pilots¹. See figure 1.

Current and Predicted-Future Pilot Inventory Deltas (Available vs. Required)

	FY97	FY98	FY99	FY00	FY01	FY02
Fighter	-369	-536	-626	-644	-721	-794
Sortie	241	71	-33	-115	-144	-174
Tanker	472	340	285	235	187	57
Support	212	21	31	61	-39	-36
Other	-84	-114	-228	-281	-353	-364
Combat	5	56	73	32	9	6
Infantry	7	34	50	36	44	39
Unassigned	-664	-673	-681	-685	-684	-684
Total	-41	-721	-1089	-1309	-1750	-1951

RL/BL as of Jul 98

Figure 1 Pilot Inventory Deltas

Using the pilot bonus take rate as a barometer to gauge pilot intent to stay in service, the USAF estimates that by fiscal year 2002 (FY02) it will have a shortage of 1,951 total

pilots². Within the last three years alone, the USAF has lost 4,306 pilots while producing only 2,096.³ The airlines are hiring pilots at historic levels. Two primary reasons for this hiring blitz are to fill vacancies created by retiring Vietnam era pilots, and to meet the demands of current economic growth. Historical data shows that the airline industry's largest source of new pilots is the United States military. This remains true today, as military pilots of all four services are being heavily recruited by the civilian sector.

The Air Force assumes a certain level of attrition from the total number of pilot trainees each year. The current pilot retention problem has been aggravated by the post Desert Storm military drawdown. During this time, the USAF decreased pilot production by more than 50 percent, from approximately 1100 to 500 pilots per year. This reduction in production capability combined with the decreased retention of pilots with seven to eleven years of service has created a severe shortage of mid-level company grade officers, as depicted in figure 2. The area beneath the solid line indicates actual shortages.⁴

As the mid-level Captains get out of the service to pursue other careers, the USAF is forced to increase the percentage of inexperienced aviators to fill the void. Additionally, increased numbers of senior major and lieutenant colonels in cockpits creates a void of experienced aviators on staffs throughout the Air Force. While filling cockpits, this solution does so at the expense of readiness, as well as robbing the staff of the much-needed expertise provided by field grade officers. When new lieutenants and old major make up the core of a fighter squadron, the USAF will have a force of questionable ability. Not implying that majors and lieutenant colonels cannot be good fighter pilots,

but the USAF is asking them to fulfill a role that was meant for junior company grade officers. Officers with the ambition, attitude and physical stamina to accomplish the mission at levels our country expects and deserves.

End FY99 Inventory (Available vs. Experience-Needs)



Figure 2 FY 99 Pilot Inventory

The effectiveness of the Air Forces, as an instrument for ensuring peace, depends on its ability to kill and destroy more efficiently than any potential enemy. In order for the United States Air Force to maintain aerial supremacy, it must recruit and retain the most highly qualified professional officer corp. In looking to the future, one cannot be completely confident of very many things; however we can be reasonably certain that during the next twenty years the world will continue to be full of conflicting interests and national objectives will have to be supported by military power. As long as military power is needed, the Air Force tactical fighter pilot will be needed. Weakness has proven to be an invitation to aggression many times in past history and a strong tactical air-strike capability may provide a deterrent to future limited wars.⁵

The decisive factor to stay or leave the military varies dramatically from one individual to the next and ranges from purely family issues to financial concerns. Military pay has historically been viewed as the number one reason for pilot separation,

causing Congress and the Department of Defense (DoD) to target this area with almost total disregard for all else. The Air Force appears to be moving in the right direction with current solutions for pilot retention, which include reducing operations tempo (OPTEMPO), increasing quality of life for service and family members, and addressing rated officer pay.⁶ However, further analysis on all aspects of this problem is required.

Recent circumstances have created a culture where careerism, or lack of commitment to service, is adversely affecting fighter pilot retention. The United States Air Force as an institution must develop an atmosphere of professionalism that transcends career and stresses the uniqueness of the profession of arms. Because of the varied reasons for pilot separation, the Air Force must focus on those things it can do well. While the history of airpower is relatively short compared to U.S. armored and naval forces, there is a rich heritage that cannot be overlooked. Following is a brief synopsis of some of the storied past of this great service, in an attempt to form a basic understanding for what it is that makes a USAF fighter pilot unique.

Notes

¹ Colonel Jim Green, "Assignment," briefing, Air Command and Staff College, Maxwell AFB, AL, 11 September 1998.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Lt. Col. Harris S. Boyce, "Tactical Air Command's Pilot Retention Problem," Research Report no. 3299 (Maxwell AFB, AL: Air War College, 1967), 5

⁶ "Air Force Moves to Retain Pilots," *Air Force News*, June 5 1997.

Chapter 2

Historical Perspective

"The Air Force exists to fight and win wars... that is our expertise. It is what allows us to be called professionals. We are entrusted with the security of our nation. The tools of our trade are lethal, and we engage in operations that involve risk to human life and untold national treasures. Because of what we do our standards must be higher than those of society at large. The American public expects it of us and properly so. In the end, we earn the respect and trust of the American people because of the integrity we demonstrate."¹

General Ronald Fogleman

As an air-minded service, Air Force officers must share the conviction that airpower is an essential element of our national security. As a powerful instrument of national policy, the USAF must strive for increased stability and effectiveness. This we can do by being dedicated to further developing the Air Force and bringing to the attention of the public the values of the Air Force capabilities.²

Aviation Pioneers

The early records of powered flight are filled with numerous accounts of machismo and daring that truly leave the reader in a state of awe at the courage shown by the pioneers of flight. Carl A. "Tooe" Spaatz, and Henry H. "Hap" Arnold, forefathers of the US Air Force, played a unique role in the history of airpower, molding and shaping

the very essence of our forces as we know them today. Yet even our forefathers struggled with career decisions, and whether or not to stay in the military.

Pay and benefits of an early Air Corps pilot were not lavish by any means, but the advent of flight pay did offer some assistance. Early efforts by Congress to compensate rated personnel awarded pilots an additional 75 percent of their base pay.³ This amount was soon decreased through the National Defense Act of 1920 to 50 percent of base pay.⁴ Even as a very senior field grade officer, Spaatz, who earned more per year than most any other non-General officer, lived comfortably, but with little left over from day to day expenses.⁵ In 1925, Spaatz lamented in his diary, "I have \$300 in the bank, and owe about \$2,000."⁶ While wealthy by no means, Spaatz's military pay afforded him relative peace of mind and the comfort of lifestyle unavailable to many of his peers.⁷

Aviation history indicates pilots faced many more daunting problems than whether or not to become an airline pilot, yet even our most celebrated Air Force Chief of Staff, Hap Arnold, was confronted with this issue at a major crossroads in his career. In 1929, while attending Army Command and General Staff School, Arnold was offered a position as managing director, and president, Pan American Airways.⁸ It was an extremely difficult decision for major Arnold, as he had 21 years of service, and little chance for promotion, four children to raise and educate, with the only surety being a military retirement and pension. A discussion with his wife, Bee, yielded the following: "All I ask," Bee said, "is that you never leave the service with a chip on your shoulder. I don't want you to be among the army of disgruntled ex-service men. When you're on top, that's all right. But you're down now, and you're unhappy about the way things are going. Think it over. Do as you please, but think it over."⁹ Very sound advice that

affected history. How many other officers like Major Arnold are there today at those same crossroads, receiving much different advice, and choosing the alternate path?

Korea to Vietnam, the Advent of the Jet Fighter

With the advent of the jet fighter, came a new breed of pilot. This attitude, or warrior spirit while not a monopoly of the fighter pilot community, was widely shared within it and entailed a sense of self confidence and pride that verged on arrogance.¹⁰ It is with this spirit in mind that we come to more greatly appreciate our fundamental purpose as a service: to fly, fight and win. The warrior spirit could be found in most any model aircraft, but the aircraft of preference was the high performance single seat fighter.¹¹ It was a culture that placed a premium on cockiness and informality. A fighter pilot spent more time in a flight suit than in a uniform. In this world, status was based upon flying ability, not degrees, rank, or "officer" skills.

The Air Force's emphasis in the 1950s on the singular skill of piloting distinguished it from other services. During the Korean War, over 50 percent of the Air Force Officer Corps had silver wings, and almost all commanders were pilots: 200 of the 207 Air Force general officers in 1950 were pilots. Furthermore, unlike the Army and the Navy, where most officers received their commission from ROTC or the military academies, two thirds of the Air Force officers received their commission directly through the Aviation Cadets--a program that combined officer candidate school with pilot school. Pilot training, in short, was the primary military initiation for the majority of Air Force officers. Pilot training defined the Air Force officer and presented him with skills and values necessary to flourish within the Air Force environment. In both a physical and psychological sense, it lifted him from the ground and transformed him into an "air-minded" individual and a member of the Air Force's "flying elite."¹²

Being an Air Force pilot was many a young man's goal growing up in the 40s, 50s and 60s. It was a fraternity of sorts that offered experiences, and a lifestyle glamorized by both book and film. As Chuck Yeager noted: "A fighter pilot doesn't care where in

the world he is stationed as long as the flying is good. Outside of actual combat, which is the ultimate flying experience, most of us old-timer fighter pilots stayed in the military because we loved to fly fast airplanes, and the Air Force owned them.”¹³

Modern Day Era

The Vietnam War period was the first time the Air Force had any indication that pilot retention would someday be a problem, as pilot separations became a national issue. The USAF experienced the negative aspects of pilot retention when in 1966, 107 tactical fighter pilots left the Air Force voluntarily.¹⁴

The fighter pilot of the 60s enjoyed one of the greatest technology growth periods in the history of aviation. With the development of mach 2 fighter aircraft such as the F-4 Phantom, the tactical fighter pilot witnessed aircraft and weapon capabilities that far exceeded even the most wild imaginations of our USAF forefathers. Even with the recent addition of high technology, new airliners are still no match for the excitement and challenge of today's modern fighter. But, USAF F-15s and F-16s (current frontline fighters) will be 20 to 30 years old when the Air Force's new F-22 becomes operational in 2005. With the Air National Guard and Air Force Reserve now flying frontline fighters, the Air Force no longer enjoys the monopoly on high performance aircraft. This allows a fighter pilot to separate from the Air Force and still have the opportunity to strap into his fighter cockpit on weekends. The Air Force faces a daunting task in keeping its pilot force intact. With this history as a backdrop, I will now focus on the issues affecting pilot retention in the 90s and beyond.

Notes

¹ Quoted in Maj. Gen. Charles H. Coolidge, Jr., "Just the facts," Pilot Retention brief, Combat Air Forces Commander's Conference, Randolph AFB TX, March 1997.

² SecAF Harold Brown, "USAF's Foreseeable Future," *Air Force*, May 1966, 43.

³ Richard D. Davis, *Carl A. Spaatz and the Air War in Europe*, (Washington D.C.: Center for Air Force History, 1992), 16.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ DeWitt S. Copp, *A Few Great Captains: The Men and Events that Shaped the Development of U.S. Air Power* (Garden City, N.Y.: Doubleday, 1980), 58.

⁹ Copp, 59.

¹⁰ John Darrel Sherwood, *Officers in Flight Suits: the Story of American Air Force Fighter Pilots in the Korean War* (New York University Press, 1996), 6.

¹¹ Ibid.

¹² Copp, pp37-38.

¹³ General Chuck Yeager & Leo Janos Yeager, *An Autobiography* (New York, N.Y.: Bantam Books, 1985), 245.

¹⁴ Boyce, 2.

Chapter 3

Scope of the Problem

Throughout the past 30 years, the airlines have played a very large role in the attrition of USAF pilots. Airline hiring patterns are not steady state, but cyclical. Combining this with the unpredictable nature of the economy, the Air Force becomes the unlucky recipient of this ebb and flow situation, as they face the dilemma of trying to find the best possible solution to rated management. The demand for well-trained pilots has steadily increased throughout the 90s, with the vast majority of commercial pilots coming from the military, and subsequently the Air Force. Today's Air Force contains the fewest number of pilots in its history.¹

Insufficient pilot retention directly affects U.S. combat readiness. Fighter pilots reach peak readiness at approximately the time their service commitment expires. On average, a fighter pilot has completed two tours in a major weapon system (MWS), and is the workhorse of a fighter squadron. These individuals are the instructors counted on to bring the new fighter pilot up to speed. They are the flight commanders, schedulers, flight examiners, supervisors of flying, weapons officers, safety officers, and the mission commanders who will lead the squadron pilots into combat. These are the pilots who make operational fighter squadrons "operational." Losing this core of experience directly affects combat readiness of the USAF.

Economic Issues

Exit surveys of separating pilots indicate that pilots are not leaving for the money. The fact remains that when airlines are hiring, military pilot retention is lower², as seen below in figure 3.

Number of Major Airline Hires vs USAF Cumulative Continuation Rate

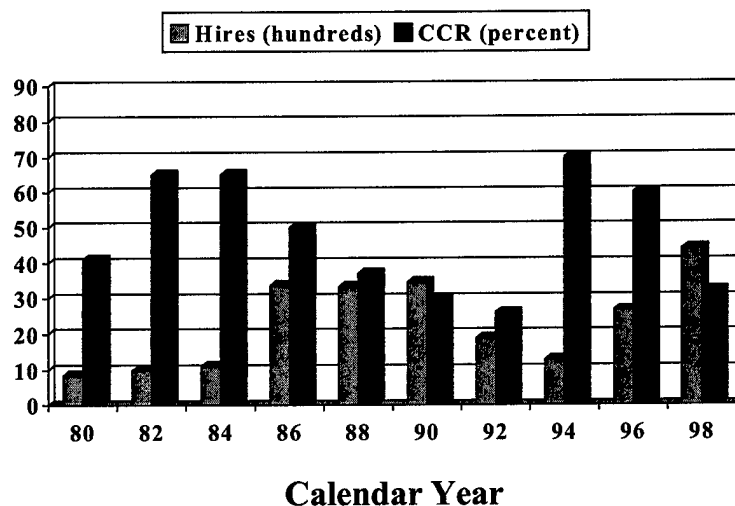


Figure 3 Airline Hires vs USAF Retention

The military has historically been concerned that the airlines have a detrimental effect on pilot retention. The major airlines hire a large number of departing active duty pilots. As of 1995, it was estimated that 75 percent of major airline pilots had military experience. Periods of airline hiring have coincided with reduced retention rates. During the airline growth years (1985-1990), the major airlines hired an average of 4,083 pilots per year, with about 40 percent of them coming from the U.S. Air Force. A 1988 Department of Defense study projected a pilot shortage of 2,900 by 1994 due to the extraordinary employment opportunities in commercial aviation.

The shortage forecasted by the DoD study did not occur for a couple of reasons. Shortly after the study was concluded, the Air Force drawdown began, dramatically reducing the number of pilots required by the Air Force. Even if the original projection (of 2,900 pilots) were accurate, the dramatic pilot force reduction would have left the Air Force with an overage of approximately 2,100 pilots in 1994. Additionally, the airlines entered a slow-growth period during the early nineties, particularly during the years 1991, 1992, and 1993. The associated Cumulative Continuation Rate (CCR), lagged by two years, increased from 26 percent to 45 percent, then 70 percent and 72 percent during those same years. Ironically, at the same time the Air Force was attempting to reduce pilot inventory levels, more pilots were electing to stay on active duty.

Even as the Air Force attempted to reduce pilot inventory to match new requirements, the Air Force projected a future pilot shortage. The pilot production rate was cut to approximately 500 a year from 1994 through 1996 to help alleviate existing overages, even as studies forecasted a shortage as early as 1997. Over the past several years, airline hiring has increased and retention rates have once again dropped. The FY1997 CCR dropped to 57 percent, and the pilot bonus take rate dropped to 30 percent...both are expected to continue to decrease. The Air Force is now anticipating a shortage of approximately 2,300 pilots by the year 2002, nearly 17 percent of the total pilot requirement.³

Decreased pilot retention has a negative economic impact on the Air Force as the investment paid to train a combat ready fighter pilot is indeed significant, approaching nearly \$7 million to train a front line fighter pilot. While the replacement cost is significant, the loss of a combat ready asset is clearly just as critical. For every experienced pilot that separates from the service, a new pilot must be trained, a process that is limited not only by budgetary constraints, but also training availability. This process is extremely costly and very time consuming, taking up to five years, just to produce an experienced fighter pilot (500 hours in a MWS). Without sufficient retention, the Air Force cannot properly maintain a combat ready force.

Aviation Continuation Pay, or bonus, was originally introduced as a temporary fix to the pilot retention problem of the late 80s. During the off airline hiring years of the early 90s, the bonus appeared to do just that. Interesting to note however is the fact that as the

bonus rate nearly doubled in 1998 to \$22 thousand per year, with the airlines once again hiring, bonus take rate fell to an all time low of 26 percent.⁴

The military cannot afford to compete monetarily with the civilian sector, and the Air Force should not try. A military career in the profession of arms is a calling. It is an elite profession not meant for everyone. While adequate pay is necessary to keep good people, the Congress, DoD, and Air Force leadership must remember what brought the fighter pilot into military service. It was not the money.

Family Concerns

Many exit surveys indicate family and quality of life as the determining factor in separation. With the post cold war downsizing, long deployments, numerous TDY commitments, and long duty days at home station, have become a way of life in the United States military. The phrase "do more with less" may be overused, but has become the mantra of the 90s. As resources become scarcer due to shrinking military budgets, and world demand on pilot expertise continues to rise, Air Force senior leaders face a most difficult challenge. Accomplishing the mission, while providing quality off-duty time for the young airman and his family will be a daunting task.

Quality of life issues center primarily on an airman's family and Air Force families are quite different today compared to years past. Demographics of our forces have changed considerably in 50 years. From the time of our Air Force's birth, throughout the Vietnam era, approximately 70 percent of the rated force were unmarried.⁵ In marked contrast only 18 percent are single and 82 percent are married in 1998.⁶ This high turn around in marital status negatively impacts pilot retention, as decreased quality of life and high OPTEMPO are consistently the top two reasons that separating pilots give for

leaving the service.⁷ In a recent article explaining why he asked not to be promoted to major, a young captain summed it up when he stated: "I have no problem with service before self, but I'm not willing to put service before family."⁸

If the Air Force is unable to compete monetarily, and cannot control a pilot's marital status or family, where can it improve and make a difference in the fight for pilots? Leadership, camaraderie, and esprit de corps are three traits historically linked with the profession of arms. It is these three areas on which I will focus in the following sections.

Leadership

In 1978, then Tactical Air Command was concerned about the hemorrhage of talent and the commander constituted a board of pilots that were leaving the service. This "committee" was to provide insight and recommendations to the TAC commander. To offset this admittedly parochial view, the commander asked for a survey of the force that was staying. One young captain chose to detail his complaints in a simulated letter of resignation compiling all of the irritants that he had endured over the years. Although not included in his wing's official response, the letter, now known as the "Dear Boss Letter", resonated with the force and proliferated through it and was ultimately published by the Armed Forces Journal⁹. Fortunately for the author (presently an active duty Air Force Major General), the TAC/CC took the comments as challenges to be worked. The letter pointed out that the officer was tired of doing more with less, and tired of a poor assignment system. He was tired of an organization with misplaced priorities, and out of touch senior leadership. However, most of all this fighter pilot was tired of poor leadership and the lack of esprit de corps espoused by senior staffers and commanders. "All those Masters and PMEs and not a leadership trait in sight!"¹⁰

It is unfair to say that nothing has changed in 20 years. The Air Force has addressed many of the above issues, yet disconnected leadership remains an issue at all levels. One contributing factor to the disconnect of senior leadership from the real problems is the tendency of intermediate levels to keep "dirty laundry" under wraps.

Hide as much as you can... particularly from the higher headquarters that could help you if only they knew. They never will though – staff will see to that. "Don't say that to the General!" or, "The General doesn't want to hear that." I didn't know he was paid to like things – I thought he was paid to run things... how can he when he never hears the problems?¹¹

Two studies on pilot retention were conducted in the British Royal Air Force in the late 80s. These studies were the basis for a paper written by Wing Commander Peter V. Harris at Air War College in 1989, entitled "Pilot Retention and Air Force Leadership." The Harris paper discusses the leadership connection, and states that senior leaders are seen as impersonal, indifferent, and out of date. He proceeds to describe staff officers as appearing superior, unhelpful, self-motivated and over-eager to forget their operational experience. A two-star led study of the RAF in 1987 concluded that:

Social change over the past 10 years has accelerated and in many areas the service has simply failed to keep pace, or failed to explain why the RAF should remain different. The aspirations of many of our highly intelligent young officers are not being met, they are disillusioned and prepared to leave the service rather than accept the situation. It is sadly clear that our leadership from group captain upward does not now enjoy the same degree of confidence and admiration of those below as was the case some years ago.¹²

Wing Commander Harris concludes that a common thread among high-caliber officers about to leave the service is the complaint about the remoteness of Air Force leaders. Harris further states (and this author firmly agrees): "that the single issue of leadership is a major issue in the debate on pilot retention; its resolution requires no

financial injection and it is wholly in the hands of the military.¹³ A belief echoed loudly today in the USAF, some 10 years later.

Esprit de Corps

Esprit de Corps is: "the common spirit existing in the members of a group and inspiring enthusiasm, devotion, and strong regard for the honor of the group."¹⁴ In its early years, the Air Force attempted to create an environment that built upon the unique aspects of aviation, creating an air-minded culture and institution. The Air Force accomplished this by instituting a training program that consisted of an intense initiation process, including hazing, washouts, accidents, and sometimes even death. Less than two thirds of those who entered training actually earned their wings.¹⁵

Pilot training defined the young Air Force officer of the 1940s and 1950s and created the flight suit persona. As much an initiation ritual for these men as a place for these men to develop practical skills, pilot training was a critical indoctrination period for the young officer. If a trainee could overcome the various barriers to becoming a pilot (washouts, accidents, fear of flying, and the possibility of death), he could enter the brotherhood of the flight suit. Ancestry, education, and prior military training or military academy experience had very little to do with one's status in the Air Force: wings, the flight suit, and eventually, the one hundred mission Distinguished Flying Cross was what truly defined one as "elite" in this service.¹⁶

In the Dear Boss letter, the author states: "Once you get past your squadron CO, people can't even pronounce esprit de corps. (Even a few squadron COs stumble over it.) And let me clue you in--in the fighter business, when you are out of esprit, you're out of corps."¹⁷ History shows that camaraderie, and esprit de corps were crucial to the development of our United States Air Force, and the fraternity we know as our fighter pilot corps.

Each person entering the military is unique, just as successive generations differ from the proceeding one. Each generation entering the service has no less sense of patriotism, commitment, or love of country than the forefathers who created this great service. Lack of motivation in our fighter units is often blamed on generational differences that belittle our current corps of young educated professional and dedicated officers. Generational prejudice is a common misperception only clouding the issue of pilot retention. Reasons for pilot discontent are extremely varied, and the Air Force commits a great disservice to new recruits and young officers when ignoring the positive traits of generation X and blaming pilot retention problems on differences in character and lack of patriotism. Senior leadership must address the issues as they apply today. The programs from the 70s may not address the problems of the 90s.

Notes

¹ Captain John H. Kafer, "Relationship of Airline Pilot Demand and Air Force Pilot Retention," Graduate Research Project, AFIT/GMO/LAL/98J-11 (Air Force Institute of Technology, Wright Patterson AFB, OH, 1998), 2.

² "Officer Retention Analysis," np.; online, Internet, March 8, 1999, available at <http://afas.afpc.randolph.af.mil/ora/98-endyear-ora.htm>.

³ Kafer, 6-7.

⁴ Green, 31.

⁵ Tom Bowman, "Pilots, Air Force Feeling a Crunch," *Baltimore Sun*, 1 June 1998, 1.

⁶ "Marital Status by rating", np.; on-line, Internet, December 29, 1998, available at <http://charly.afpc.randolph.af.mil/demographics/demograf/MARRTG.html>.

⁷ Bowman.

⁸ Julie Bird, "Making a Tough Costly Decision," *Air Force Times*, 11 May 1998, 10.

⁹ "Dear Boss," *Armed Forces Journal*, 5 October 1978, 13-F.

¹⁰ Ibid.

¹¹ Ibid.

¹² "The Robson Study Into Royal Air Force Officers Terms of Service," in *Pilot Retention and Air Force Leadership*, Wing Commander Peter V. Harris, (Air War College, Maxwell Air Force Base, AL, May 1989), 7.

¹³ Wing Commander Peter V. Harris, *Pilot Retention and Air Force Leadership*, Research Project (Air War College, Maxwell Air Force Base, AL, May 1989, 8.

¹⁴ Merriam-Webster's Collegiate Dictionary, Tenth Edition, 1993, 396.

Notes

¹⁵ John Darrel Sherwood, *Officers in Flight Suits: the Story of American Air Force Fighter Pilots in the Korean War* (New York University Press, 1996), 38.

¹⁶ Sherwood, 38-39.

¹⁷ "Dear Boss."

Chapter 4

Combating the Problem

Current Air Force Chief of Staff, General Michael E. Ryan, recently published a Notice to Airman dealing specifically with the Air Force's plan to combat the current pilot retention problem. These initiatives include decreasing OPTEMPO through a reduction in training exercises, decreasing inspections, and improving training opportunities for personnel deployed to Southwest Asia. In an attempt to address family concerns, the Air Force will institute new programs to assist family members of deployed personnel. Economic initiatives include pay raises, higher bonuses with more flexibility in length of commitment, and longevity induced flight pay increases. Quality of life programs include new military family housing, new child development centers, as well as education, fitness, and family support centers.¹ These recent initiatives indicate that the Air Force senior leadership is actively pursuing solutions to the pilot retention issue. I will now explore in depth these initiatives and attempt to recommend further actions to be taken.

Increased Pay and Benefits

Law establishes pay for active duty personnel, with no latitude afforded the military other than specific supplemental bonuses targeted toward certain career fields. A 1988 DoD study on aviator retention concluded that replacement cost savings greatly exceeded

the cost of a \$12,000 per year bonus.² Military pilots have been receiving the \$12,000 per year bonus since January 1, 1989, for a commitment that ensured service through 14 years of active duty. For FY97 the number of eligible pilots that were willing to take the bonus and commit to 14 years of service was a mere 34 percent.³ With record low acceptance rates, Congress approved an increase in the pilot bonus to \$22,000 per year in FY98, for a long-term commitment (through 14 commissioned service), with lesser amounts for shorter commitments. While not enough time has elapsed since inception of this program, the increased bonus has not reversed the trend, and bonus take rates slid to 26 percent in 1998.⁴

On December 21, 1998, Defense Secretary William Cohen announced a proposal for significant pay increases and retirement improvements for the FY00 budget.⁵ This package is meant to attract and retain the Air Force's high quality force credited with the recent success of Operation Desert Fox.⁶ The proposals include a 4.4 percent across the board pay raise for FY00 with 3.9 percent pay raises through FY05. Additional targeted pay raises of 0.5 to 5.5 percent for specific ranks, and other pay table reform will reward skill and performance, making promotion more financially rewarding than simple longevity.⁷ Finally, Congress appears to be committed to returning the 20-year retirement to 50 percent of base pay. General Ryan stated: "The current retirement system is not an incentive for quality people to remain in the service, and we need to change it."⁸

In a recent New York Times article Secretary Cohen stated: "It's very hard to compete against a robust economy such as we have." The author goes on to say: "The old rule of a strong economy enabling a strong military has twisted in the current gale of

prosperity. An economy this strong, with unemployment this low, becomes an impediment to the military's efforts to recruit and retain soldiers."⁹

Operations Tempo

General Michael Ryan stated, "It's not their fault they're leaving, it may be our fault. It's hard work, and it's hard on their families."¹⁰ "Pilots who are leaving say the top two reasons they are not taking the bonus are an increased workload, or "high OPTEMPO," and poor quality of life."¹¹ Acting Secretary of the Air Force, F. Whitten Peters, has acknowledged this problem, and recently announced numerous steps that the Air Force is taking in an effort to combat the corrosive OPTEMPO issue.¹²

It is clear to me that many of you are deployed too often. Or you are overworked when at your home base because you're doing both your job and the jobs of those deployed. Our increased operations tempo--the result of reducing forces by 33 percent while increasing deployments fourfold--has put heavy strains on you and your family. As Chief of Staff General Mike Ryan and I said in August, you've done everything we've asked -- and more--but we've been asking too much. This needs to stop, and it will, with our reorganization into an Expeditionary Aerospace Force, or EAF, over the next 12 months.¹³

The current OPTEMPO problem first surfaced at the termination of the Gulf war. Operation Desert Storm saw the largest deployment of military personnel in recent history. Airmen voiced very few complaints at this time because the troops felt good about their mission and were satisfied with their contribution to the war effort. Today however, with the force drawdown, and perpetual real world contingency taskings, the young officer feels as though our nation's civilian leadership has failed to establish a vision for our forces. Many wonder why they are continually forced to return time after time, for three to four month periods, to a region in which they are unappreciated and unwelcome.

In an effort to decrease OPTEMPO, the Air Force issued a directive in 1998 that reduced SWA deployments from the typical 90-120 day temporary duty assignment, to a 45-day deployment. The Air Force has also initiated a program to help personnel receive quality down time post deployment. As a means to afford our troops the chance to spend quality time off with family and friends, this policy provides one week down time for every 45 days deployed.

Using an Expeditionary Air Force concept, Acting Secretary Peters states that the Air Force will significantly reduce the strains of OPTEMPO. EAF will spread the load of deployments across the total force by increasing the number of airmen assigned to specialties that frequently deploy. This organizational reform will provide predictability and stability while providing our warfighting commanders a more flexible, tailored and better trained forces.¹⁴

Six initiatives aimed at reducing OPTEMPO for Air Force members recently released by General Ryan include:

- A 5 percent reduction in Air Force and joint training exercises in FY99 and FY00
- A 15 percent cut in people supporting chairman of the Joint Chiefs of Staff-directed exercises
- Ending Quality Air Force assessments
- A 10 percent reduction in the length of inspections and the number of inspectors used for operational readiness inspections in FY98 with another 20 percent reduction in FY99
- Combining inspector general inspections with real-world deployments when possible
- Improving training opportunities for people deployed to Southwest Asia¹⁵

One 37-year-old pilot, who hopes to land a job with the airlines, summed up the OPTEMPO problem this way: "The future I see is more deployments, and more time

away from home. I want to spend more time with my family. When I was young and single, I loved going overseas--I've seen a lot, I've done a lot. I want stability in my life."¹⁶ The EAF will attempt to give this stability, as airmen will be able to forecast with some degree of certainty, when they will deploy, and for how long.

Quality of Life

The Air Force arguably leads all services in quality of life programs, and is making a concerted effort to increase its lead in quality of life initiatives. General Ryan stated: "We are also working to improve the infrastructure that supports our force. The FY98-99 funding program constructs, replaces or improves more than 3,800 military family housing units; constructs or renovates 21 dormitories; and provides three child development centers, two education centers, one fitness center and one family support center."¹⁷

The Air Force as the youngest of the four major services, has the advantage of newer infrastructure. Nevertheless, with military family housing long a concern, the Air Force faces new challenges entering its second half-century as the age of its infrastructure becomes a larger factor. With shrinking budgets, base commanders have been forced to make tough decisions when allocating resources. Air Force programs such as those mentioned by General Ryan will help this problem, but programs require money. Congress appears to be listening, but only time will tell how committed they are to solving this dilemma.

To improve the care for families of deployed personnel, General Ryan recently announced the introduction of the Air Force ombudsman program, providing an avenue for families of deployed members to gain access to base services.¹⁸ Non-deployed

squadron mates will act as a liaison with the deployed individual's family, ensuring that any family problems are dealt with expediently by the appropriate military agency.

The Air Force is also working to improve communication to family members for deployed personnel. Units are currently using a system that links deployed units with their home station through a videophone that operates over standard phone lines, while Air Mobility Command is installing internet capable personal computers in aircrew lounges.¹⁹

Notes

¹ Gen. Michael E. Ryan, *Air Force News Service*, 24 November 1998, n.p.; on-line, Internet, available at <http://www.afpc.af.mil/retention/ryanchall.htm>.

² Department of Defense, *Aviator Retention Study*, (Washington D.C.: Government Printing Office, 1988), 7-8.

³ Green, 31.

⁴ Ibid.

⁵ MSgt Linda Brandon, "Defense Secretary Announces Significant Pay and Retirement Improvements for FY 2000," *Air Force News Service*, December 1998, n.p.; on-line, Internet, available at http://www.af.mil/news/Dec1998/n19981222_981996.html.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Carey Goldberg, "Recent Request for Pay Raises May Help Stem the Loss of Military Officers," *New York Times*, 27 December 1998, n.p.; on line, Internet, available at <http://ebird.dtic.mil/Dec1998/e19981228recent.htm>.

¹⁰ Bowman.

¹¹ Ibid.

¹² F. Whitten Peters, "Acting Secretary sets Sights on Retention, Future," *Air Force News Service*, October 1998, n.p.; on-line, Internet, available at http://www.af.mil/news/Oct1998/n19981027_981635.html.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ryan.

¹⁶ Bowman.

¹⁷ Ryan.

¹⁸ Ryan.

¹⁹ Ibid.

Chapter 5

Conclusions

"In the 1950s the Air Force offered young, mostly middle class individuals tangible status symbols: gold lieutenant's bars, silver wings, and a state of the art fighter with their name painted right on the fuselage. Flying offered status and freedom unobtainable in the increasingly bureaucratic marketplace of the 1950s."

John Darrel Sherwood

According to Sherwood, the Air Force officers in his study joined the Air Force because it was a first class way to perform a military obligation. Pilots did not seek skills through which they could market themselves in the outside world once their commitments were up. Instead, the Air Force would become an end unto itself. Of the numerous pilots interviewed by Sherwood for his book, only one of these pilots entered the Air Force to become a career officer. All but one would choose an Air Force career after the Korean War ended.¹ General Wilbur Creech stated that "retention rates have waxed and waned over the years. It is almost in direct proportion to--and there is a high correlation between--the suction of the airlines and the exodus of rated pilots."² If this statement is correct, (as this study also indicates) what can Air Force senior leadership do to try to stem the tide of pilot exodus? While many studies focus on what leads fighter pilots to leave the Air Force, I have yet to see one focus on why fighter pilots choose to stay in the Air Force.

When I began the research for this paper, I expected to find that the problem the military faces in terms of pilot retention was due to generational differences in values and priorities. It was this author's contention that pilot retention problems were due to the current generation (generation X) in fact being less professional, and only seeking a means to make themselves marketable in the civilian sector, i.e. the airlines. What I have realized through countless hours of research is that careerism is not a generational issue, but an organizational one.

The young airmen entering the flying ranks today are no less patriotic or professional than past generations, just as the current retention problems are no different than those experienced in the 70s, and 80s. The capabilities of our current force would simply astonish our forefathers, and would not be possible without the tremendous talent, energy, and motivation found in today's young airmen. The Air Force can embrace and use this vital commodity, or simply watch as they move on to occupations in the civilian sector. To accomplish this, I believe the Air Force must recapture the glory of its past, and build upon the traditions that have evolved through the past half-century. To recreate an air-minded culture and institution, building upon the unique aspects of aviation, while remembering its storied past. This will rekindle the spark that appealed to the young men and women of America when they decided to join the elite profession of arms characterized by today's U.S. Air Force officer, and fighter pilot.

To help realize this goal, the Air Force needs to take advantage of WWII, Korean War, and Vietnam War heroes, before this vital commodity disappears. At the same time, the Air Force possesses many current "heroes" that participated in Operation Desert Storm and numerous other modern contingencies that continue to be ignored today.

Fascinating engagements and battles from the Gulf War abound. Most of these stories reside only at the various fighter bars throughout the Tactical Air Force. The Air Force must cultivate and publicize the courage and heroics displayed by these modern day warriors. One place to accomplish this would be a renewed emphasis of time-honored traditions such as dining-ins. High OPTEMPO, political correctness, and lack of established tradition has nearly done away with this program, which helps build camaraderie throughout the total force, reintroducing the warrior spirit to our young airmen. The Air Force also has a unique opportunity to use the Airman Basic Course, Reserve Officer Training Corps, Officer Training School, and the Air Force Academy to instill this air-mindedness, and create an institution based upon the uniqueness of airpower.

The Air Force has many opportunities to encourage camaraderie and build esprit de corps. One factor that cannot be stressed highly enough is competition. Competition at all levels, from squadron Top Gun, to wing turkey shoots, and MAJCOM competitions such as Long Rifle, and William Tell keep a fighter squadron motivated as the pilots vie to be number one. In the drive to reduce OPTEMPO, it is imperative for fighter squadrons to continue to participate in exercises such as Red Flag, Maple Flag, and Cope Thunder. While these exercises take airmen away from home and family, they provide a great learning experience, as well as a tremendous opportunity to increase esprit de corps in a controlled setting. One final suggestion is to allow fighter squadrons their individuality, keeping and building upon the time-honored tradition of squadron hooches, where pilots can socialize and increase camaraderie while telling "war stories" in a casual aviation-inspired atmosphere.

For senior leadership to be effective, it must lead by example. I believe if leaders lead by example and are honest with their troops, they will be rewarded with unfailing loyalty and a fighting force more dedicated to the mission. To accomplish this, I recommend that wing commanders and senior leaders make regular visits to units throughout the Air Force. They should fly with their units when possible. Young pilots do not expect colonels and generals to compete for "Top Gun" but it is important to be credible in the airplane. Never cut short a brief or debrief for convenience of schedule; if you have time to fly you have time for a full brief and debrief. If senior leadership truly cares, this is the one chance to find out how an organization is really running, as well as what is on the minds of future leaders.

It is imperative that leaders be chosen on merit and capability to accomplish the task, and not for political reasons, or the time honored tradition of "next in line" selection. This process must be consistent from commander to operations officer through flight commander. After choosing the correct leaders, let them lead, and do not dictate day to day operations. Squadron commanders are the essence of the squadron and need to lead at every opportunity on the ground and in the air, instructing new pilots, and leading sorties during exercises and contingencies. These leaders must be willing to take a stand for their people, without worrying about how it will affect his or her career.

While it is necessary to reduce negatives and address problem areas for our airmen, there will always be individuals seeking greener pastures. The Air Force leadership can only affect certain issues in the pilot retention battle. Limited resources make it impossible to match airline pay/benefits, and increased tasking with decreased manpower drives OPTEMPO, but one economic factor that requires study is the pilot bonus issue.

Record low take-rates indicate that the bonus is NOT keeping pilots in; in fact, it may actually be driving them out. A mid-career Captain with the bonus makes nearly \$15,000 more per year than the lieutenant colonel commanding him! At the 14-year point, he faces a pay cut just as the Air Force places more responsibility on him. As mid-level officers make career decisions, the prospect of a future decrease in lifestyle cannot instill great confidence in the organization, or future aspirations. I therefore recommend that the Air Force do away with the pilot bonus, and revamp the flight pay program, rewarding those pilots that continue to serve with increased pay...creating an incentive for making the USAF a career.

I believe that the vast majority of fighter pilots stay in the service because they love the challenge of flying fighter aircraft, and pushing themselves for constant improvement. They enjoy the continuous competition, and thrive under the rigorous pressure of trying to be the best. They want an opportunity to make a difference in some young airman's life, whether through command or mentoring. Lastly, they cherish the camaraderie and fraternal bond, or the esprit de corps, of the fighter squadron.

What is it about our service that inspires the bright-eyed second lieutenant and lieutenant colonel alike? Although I did not join the military until 1984, I feel a kinship with the fighter pilots of old. I admire and look up to our forefathers who had a vision of this great organization that we know as the USAF. At my pilot training graduation ceremony there was a slide-show presentation put to music. As Sammy Hagar of "Van Halen" sang the words "higher and higher, straight up we'll climb," an F-15 soared vertically into the upper reaches of the atmosphere. It is a moment that I will never forget, with butterflies in my stomach and a tear in my eye. Becoming a fighter pilot has

truly been a dream come true for this Air Force officer. I only hope to one day have the chance to influence a future bright eyed second lieutenant as a commander of an operational F-15 squadron.

Neither my contemporaries nor I joined the service as a prelude to civilian airline employment. The time has come to recapture the glory of our past and rekindle the fire that burns within each officer that wears a flight suit.

High Flight

*Oh, I have slipped the surly bonds of earth,
And danced the skies on laughter-silvered wings;
Sunward I've climbed and joined the tumbling mirth
Of sun-split clouds...and done a hundred things
...You have not dreamed of...wheeled and soared and swung
High in the sunlit silence. Hov'ring there,
I've chased the shouting wind along, and flung
My eager craft through the footless halls of air.
Up, up, the long delirious burning blue
I've topped the windswept heights with easy grace
Where never lark, or even eagle flew.
And while silent, lifting mind I've trod
The high untrespassed sanctity of space...
...Put out my hand and touched the face of God*

- John Gillespie Magee, Jr.

Notes

¹ Sherwood, 36.

² General Wilbur L. Creech, *U.S. Oral History Interview*, United States Air Force Historical Research Agency, June 1992, 91.

Bibliography

- "Air Force Moves to Retain Pilots," *Air Force News*, June 5 1997.
- Bird, Julie, "Making a Tough Costly Decision," *Air Force Times*, 11 May 1998.
- Bowman, Tom, "Pilots, Air Force Feeling a Crunch," *Baltimore Sun*, 1 June 1998.
- Boyce, Lt Col Harris S. "Tactical Air Command's Pilot Retention Problem," Research Report no. 3299. Maxwell AFB, AL: Air War College, 1967.
- Brandon, MSgt. Linda, "Defense Secretary Announces Significant Pay and Retirement Improvements for FY 2000," *Air Force News Service*, December 1998, n.p.; on-line, Internet, available at http://www.af.mil/news/Dec1998/n19981222_981996.html.
- Brown, SecAF Harold, "USAF's Foreseeable Future," *Air Force*, May 1966.
- Coolidge, Maj. Gen. Charles H. Jr., "Just the facts," Pilot Retention brief, Combat Air Forces Commander's Conference, Randolph AFB TX, March 1997.
- Copp, DeWitt S., *A Few Great Captains: The Men and Events that Shaped the Development of U.S. Air Power*. Garden City, N.Y.: Doubleday, 1980.
- Creech, General Wilbur L., *U.S. Oral History Interview*, United States Air Force Historical Research Agency, June 1992.
- Davis, Richard D., *Carl A. Spaatz and the Air War in Europe*. Washington D.C.: Center for Air Force History, 1992.
- "Dear Boss," *Armed Forces Journal*, 5 October 1978.
- Department of Defense, *Aviator Retention Study*. Washington D.C.: Government Printing Office, 1988.
- Goldberg, Carey, "Recent Request for Pay Raises May Help Stem the Loss of Military Officers," *New York Times*, 27 December 1998, n.p.; on line, Internet, available at <http://ebird.dtic.mil/Dec1998/e19981228recent.htm>.
- Green, Col. Jim "Assignment," briefing, Air Command and Staff College, Maxwell AFB, AL, 11 September 1998.

Harris, Wing Commander Peter V., *Pilot Retention and Air Force Leadership*, Research Project. Air War College, Maxwell Air Force Base, AL, May 1989.

Kafer, Captain John H., "Relationship of Airline Pilot Demand and Air Force Pilot Retention." Graduate Research Project AFIT/GMO/LAL/98J-11. Air Force Institute of Technology, Wright Patterson AFB, OH, 1998.

"Marital Status by rating", np.; on-line, Internet, December 29, 1998, available at <http://charly.afpc.randolph.af.mil/demographics/demograf/MARRTG.html>.

Peters, Acting SecAF F. Whitten, *Air Force News Service*, October 1998, n.p.; on-line, Internet, available at http://www.af.mil/news/Oct1998/n19981027_981635.html

Ryan, Gen. Michael E., *Air Force News Service*, 24 November 1998, n.p.; on-line, Internet, available at <http://www.afpc.af.mil/retention/ryanchall.htm>.

Sherwood, John Darrel, *Officers in Flight Suits: the Story of American Air Force Fighter Pilots in the Korean War*. New York University Press, 1996.

Yeager, General Chuck, & Leo Janos Yeager, *An Autobiography*. New York, N.Y.: Bantam Books, 1985.

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